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EXAMINER CAJILIG, CHRISTINE T				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/736,702

**Applicant(s)**

GRAFENAUER, THOMAS

**Examiner**

CHRISTINE T. CAJILIG

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**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-10,12-20,22 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-10,12-20,22 and 24-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Eisermann (US 6,804,926 B1).

Regarding claim 8, Eisermann discloses a building board, comprising a first longitudinal edge having a tongue (6); a second longitudinal edge opposite the first longitudinal edge and having a groove (20) bounded by a top lip (22) and a bottom lip (21); a first transverse edge adjacent to the first and second longitudinal edges and having a tongue (6); a second transverse edge adjacent to the first and second longitudinal edges and having a groove (21; the board of Eisermann having the same tongue and groove connection for all four edges); and an upwardly projecting extension (a) on the bottom lip of the second longitudinal edge that locks interconnected boards in a horizontal direction in relation to one another (Col 6, Ln 21-27), wherein a front edge of the tongue of the first longitudinal edge comprises a bevel (12), and a recess (b) formed in the tongue adjacent the bevel, the bevel is a flat or planar surface, the bottom lip of the second longitudinal edge has a concave recess (23) over its length, and the tongue of the first longitudinal edge has a convex underside (7) which corresponds to the concave recess.

Regarding claim 25, Eisermann discloses the structure discussed above and further discloses that the recess comprises a surface (11) that is conterminous with the bevel and, in an assembled state, is substantially horizontal.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pervan (US 7,127,860 B2) in view of Eisermann (US 6,804,926 B1).

Regarding claim 1, Pervan in Figures 12a and 12b discloses a building board which has two mutually opposite longitudinal edges (Fig. 12a) and two mutually opposite transverse edges (Fig. 12c) running at right angles to the longitudinal edges, one longitudinal edge and one transverse edge in each case having a tongue (10) and the opposite longitudinal edge and transverse edge having a groove (9) corresponding to the tongue, via which a plurality of building boards can be connected to one another and locked in the vertical direction in relation to one another, but does not disclose that the building board is made of OSB (oriented strand board) and wherein the tongue on the longitudinal edge comprises a bevel and a recess adjacent the bevel, and the tongue and the groove on the longitudinal edge are designed such that two boards

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which are connected to one another at the longitudinal edges are also locked in a horizontal direction in relation to one another, wherein the groove on the longitudinal edge is bounded by a top lip and a bottom lip, the bottom lip projects laterally beyond the top lip and has a concave recess over the entire length, and the tongue has a convex underside which corresponds to the recess, and the bevel is a flat or planar surface. However, It would have been obvious to one having ordinary skill in the art at the time of invention to use oriented strand board, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Moreover, Eisermann discloses a building board wherein a tongue (6) on the longitudinal edge comprises a bevel (12) and a recess (a) adjacent the bevel, and the tongue and a groove (20) on the longitudinal edge are designed such that two boards which are connected to one another at the longitudinal edges are also locked in a horizontal direction in relation to one another (Col 6, Ln 21-27), wherein the groove on the longitudinal edge is bounded by a top lip (22) and a bottom lip (21), the bottom lip projects laterally beyond the top lip and has a concave recess (23) over the entire length, and the tongue has a convex underside (7) which corresponds to the recess, and the bevel is a flat or planar surface to provide a tongue and groove joint that reduces that amount of deformation on the walls of the joint during assembly (Col 4, Ln 38-42). Therefore, it would have been obvious to a person having ordinary skill in the arts at the time of the Applicant's invention to modify the structure of Pervan to have the longitudinal edge have the tongue on the longitudinal edge comprises a bevel and a

recess adjacent the bevel, and the tongue and the groove on the longitudinal edge are designed such that two boards which are connected to one another at the longitudinal edges are also locked in a horizontal direction in relation to one another, wherein the groove on the longitudinal edge is bounded by a top lip and a bottom lip, the bottom lip projects laterally beyond the top lip and has a concave recess over the entire length, and the tongue has a convex underside which corresponds to the recess, and the bevel is a flat or planar surface as taught by Eisermann to provide a tongue and groove joint that reduces that amount of deformation on the walls of the joint during assembly.

Regarding claim 24, Pervan already modified by Eisermann discloses the structure discussed above and further discloses that the tongue and the groove on the transverse edge are designed such that two boards which are connected to one another at the transverse edges are not locked in a horizontal direction in relation to one another.

Claims 1, 8, 16, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palsson (US 2003/0079820 A1) in view of Olofsson et al. (US 6682254 B1) and Schneider (US 6,385,936 B1).

Regarding claims 1 and 22, Palsson discloses a building board which has two mutually opposite longitudinal edges (2', 2" of Figure 2) and two mutually opposite transverse edges (2''', 2<sup>iv</sup>, of Figure 6) running at right angles to the longitudinal edges, one longitudinal edge and one transverse edge in each case having a tongue (11, e respectively) and the opposite longitudinal edge and transverse edge having a groove

(13, h respectively) corresponding to the tongue, via which a plurality of building boards can be connected to one another and locked in the vertical direction in relation to one another, wherein the tongue on the longitudinal edge comprises a bevel (a), and the tongue and the groove on the longitudinal edge are designed such that two boards which are connected to one another at the longitudinal edges are also locked in a horizontal direction in relation to one another, wherein the groove (13) on the longitudinal edge (2") is bounded by a top lip (b) and a bottom lip (14), the bottom lip projects laterally beyond the top lip and has a concave recess (c) over the entire length, and the tongue has a convex underside (d) which corresponds to the recess, the bevel being conterminous with the convex underside of the tongue. Palsson does not disclose that the building board is made of OSB (oriented strand board), that the tongue on the longitudinal edge comprises a recess adjacent the bevel, nor discloses that the bevel is a flat or planar surface. However, Palsson discloses that prior art floor boards can be made out of OSB (Par 0005). Therefore, it would have been obvious to one having ordinary skill in the arts at the time of the Applicant's invention to modify the floor board of Palsson to be made of OSB as this would provide a strong and durable material for a flooring system. Schneider in Figure 3 discloses a floor board having a tongue (30) with a flat or planar bevel (46) in order to facilitate the joining process (Col 2, Ln 29-31). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the Applicant's invention to modify the floor board of Palsson already modified by Olofsson et al. to further have a bevel that is flat or planar as taught by Schneider to provide a tapered surface that would facilitate assembly. Moreover,

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Olofsson et al. discloses a floor board (Figure 5) wherein a tongue (2) comprises a recess (6) adjacent a bevel (a). Therefore, it would have been obvious to one having ordinary skill in the arts at the time of the Applicant's invention to modify the floor board of Palsson to include a recess adjacent a bevel as taught by Olofsson et al. to be adjacent the bevel of Palsson to provide a cavity where excess glue can collect (Col 3, Ln 21-28). Furthermore, the modification of a recess by Olofsson et al. being placed adjacent the bevel would have the bevel conterminous with both the recess and the convex underside of the tongue. The bevel (a) of Palsson constitutes as the entire upper surface of the tongue, as such, the placement of the recess as taught by Olofsson, which would be adjacent the bevel, would place the recess as being conterminous with the bevel in addition to being conterminous with the convex underside of the tongue.

Regarding claim 8, Palsson discloses a building board, comprising a first longitudinal edge (2') having a tongue (11); a second longitudinal edge (2'') opposite the first longitudinal edge and having a groove (13) bounded by a top lip (b) and a bottom lip (14); a first transverse edge (2''') adjacent to the first and second longitudinal edges and having a tongue (e); a second transverse edge (2<sup>IV</sup>) adjacent to the first and second longitudinal edges and having a groove (h); and an upwardly projecting extension (15) on the bottom lip of the second longitudinal edge that locks interconnected boards in a horizontal direction in relation to one another, wherein a front edge of the tongue of the first longitudinal edge comprises a bevel (a), the bottom lip of the second longitudinal



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edge has a concave recess (c) over its length, and the tongue of the first longitudinal edge has a convex underside (d) which corresponds to the concave recess, but does not disclose a recess formed in the tongue adjacent to the bevel nor that the bevel is a flat or planar surface. However, Olofsson et al. discloses a floor board (Figure 5) wherein a tongue (2) comprises a recess (6) adjacent a bevel (a). Therefore, it would have been obvious to one having ordinary skill in the arts at the time of the Applicant's invention to modify the floor board of Palsson to include a recess formed in the tongue of the first longitudinal edge adjacent to the bevel as taught by Olofsson et al. to provide a cavity where excess glue can collect (Col 3, Ln 21-28). Moreover, Schneider in Figure 3 discloses a floor board having a tongue (30) with a flat or planar bevel (46) in order to facilitate the joining process (Col 2, Ln 29-31). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the Applicant's invention to modify the floor board of Palsson already modified by Olofsson et al. to further have a bevel that is flat or planar as taught by Schneider to provide a tapered surface that would facilitate assembly.

Regarding claim 16, Palsson already modified by Olofsson et al. and Schneider discloses the structure discussed above and further discloses a bevel (g) on the top lip of the second longitudinal edge (2'') which corresponds or is complementary to the bevel (a) of the tongue of the first longitudinal edge (2').

Claims 3, 6, 9, 10, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palsson in view of Olofsson et al. and Schneider as applied to claims 1 and 8 above, and further in view of Thiers (US 2002/0056245 A1).

Regarding claim 3, Palsson already modified by Olofsson et al. and Schneider discloses the structure as discussed above, but does not disclose that the longitudinal edges and the transverse edges have a chamfer on their top side, with the result that a V-shaped joint is formed at the connecting location between two boards. However, Thiers discloses a floor board (2) wherein the longitudinal edges and the transverse edges have a chamfer (15, Par 0066) on their top side, with the result that a V-shaped joint is formed at the connecting location between two boards as shown in Figure 5. Therefore, it would have been obvious to one having ordinary skill in the arts at the time of the Applicant's invention to modify the floor board of Palsson already modified by Olofsson et al. and Schneider so that the longitudinal edges and the transverse edges have a chamfer on their top side, with the result that a V-shaped joint is formed at the connecting location between two board as taught by Thiers to provide a panel that can be easily rotated in relation to one another (Par 0067) as well as provide an aesthetically pleasing surface along the upper edges of the board.

Regarding claim 6, Palsson already modified by Olofsson et al. and Schneider discloses the structure as discussed above, and further discloses that the top side of the board has a decorative layer (3) but does not disclose that the decorative layer (3) on the top side of the board is provided with markings along which the board is capable of being fastened on the beams by means of screws or nails. However, Thiers discloses

a floor board (2) wherein the top decorative layer (23) has markings in the form of imprinted wood patterns, along which, screws or nails could obviously be fastened. Therefore, it would have been obvious to one having ordinary skill in the arts at the time of the Applicant's invention to modify the floor board of Palsson already modified by Olofsson et al. and Schneider to have markings on the decorative, along which, screws or nails could obviously be fastened as taught by Theirs to provide a decorative surface that replicates wood.

Regarding claim 19, Palsson already modified by Olofsson et al. and Schneider discloses the structure as discussed above, and further discloses an underside of the top lip (b) comprises a beveled edge (g) corresponding to the bevel, but does not disclose that the longitudinal edges and transverse edges have a chamfer on their top side, with the result that a V-shaped joint is formed at the connecting location between two boards. However, Thiers discloses a floor board (2) wherein the longitudinal edges and the transverse edges have a chamfer (15, Par 0066) on their top side, with the result that a V-shaped joint is formed at the connecting location between two boards as shown in Figure 5. Therefore, it would have been obvious to one having ordinary skill in the arts at the time of the Applicant's invention to modify the floor board of Palsson already modified by Olofsson et al. and Schneider so that the longitudinal edges and the transverse edges have a chamfer on their top side, with the result that a V-shaped joint is formed at the connecting location between two board as taught by Theirs to provide a panel that can be easily rotated in relation to one another (Par 0067) as well as provide an aesthetically pleasing surface along the upper edges of the board.

Regarding claims 9 and 10, Palsson already modified by Olofsson et al. and Schneider discloses the structure discussed above, but does not disclose a first chamfer on a top side of the top lip of the second longitudinal edge and a second chamfer disposed above the tongue of the first longitudinal edge, resulting in a V-shaped joint formed by connecting boards. However, Thiers discloses a floor board (2) wherein the first and second longitudinal edges have a first and second chamfer (15, Par 0066), respectively, on their top side, with the result that a V-shaped joint is formed at the connecting location between two boards as shown in Figure 5. Therefore, it would have been obvious to one having ordinary skill in the arts at the time of the Applicant's invention to modify the floor board of Palsson already modified by Olofsson et al. and Schneider to have a first chamfer on a top side of the top lip of the second longitudinal edge and a second chamfer disposed above the tongue of the first longitudinal edge, resulting in a V-shaped joint formed by connecting boards as taught by Thiers to provide a panel that can be easily rotated in relation to one another (Par 0067) as well as provide an aesthetically pleasing surface along the upper edges of the board.

Claims 4, 5, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palsson in view of Olofsson et al. and Schneider as applied to claims 1 and 8 above, and further in view of Kornicer et al. (US 2003/0035921 A1).

Regarding claims 4, 5, 15, and 17, Palsson already modified by Olofsson et al. and Schneider discloses the floor board above, but does not disclose that the board

comprises four layers, in which case, in the two outer layers, a longitudinal direction of strands is oriented predominantly in the longitudinal direction of the board, and in the two inner layers, a longitudinal direction of other strands is oriented predominantly in the transverse direction of the board or that the board comprises strands glued with an isocyanate resin. However, Komicer et al. discloses a multi-layered oriented strand board (10) has four layers, in which case, in the two outer layers (12, 16), a longitudinal direction of strands is oriented predominantly in the longitudinal direction of the board, and in the two inner layers (14, 15), a longitudinal direction of other strands is oriented predominantly in the transverse direction of the board as shown in Figure 1, and comprises strands glued with isocyanate resin (Par 0029-0035). Therefore, it would have been obvious for a person having ordinary skill in the arts at the time of the Applicant's invention to modify the floor board of Palsson already modified by Olofsson et al. and Schneider to have four layers, in which case, in the two outer layers, a longitudinal direction of strands is oriented predominantly in the longitudinal direction of the board, and in the two inner layers, a longitudinal direction of other strands is oriented predominantly in the transverse direction of the board and the strands glued with isocyanate resin as taught by Komicer et al. to provide a material that is better suited for use as flooring in damp environments (Par 0018).

Claims 7 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palsson in view of Olofsson et al. and Schneider as applied to claims 1 and 8 above, and further in view of Hall (US 347,425).

Regarding claim 7, Palsson already modified by Olofsson et al. and Schneider discloses the floor board above, but does not disclose that the bottom lip (14) of the groove, on the longitudinal and/or transverse side, has depressions, which are spaced apart parallel to one another, for accommodating a nail or screw head. Hall, however, discloses a cladding wherein a bottom lip (B) of a groove comprises depressions (c), which are spaced apart parallel to one another, for accommodating a nail or screw head. Therefore, it would have been obvious for a person having ordinary skill in the arts at the time of the Applicant's invention to modify the floor board of Palsson already modified by Olofsson et al. and Schneider to have the groove, on the longitudinal and/or transverse side, include depressions, which are spaced apart parallel to one another, for accommodating a nail or screw head as taught by Hall to have preformed holes to fix the floor board in place.

Regarding claims 12-14, Palsson already modified by Olofsson et al. and Schneider discloses the structure as discussed above and further discloses that the groove (h) of the second transverse edge comprises a top lip (24) and a bottom lip (10<sup>IV</sup>), but does not disclose a plurality of spaced apart recesses provided along the bottom lip of the second longitudinal edge nor that the bottom lip of the second transverse edge having a plurality of spaced apart recesses, and wherein the plurality of recesses of the second longitudinal edge and the second transverse edge are configured to accommodate countersunk nail heads or screw heads. Hall, however, discloses a cladding wherein a bottom lip (B) of a groove comprises a plurality of spaced apart recesses(c) configured to accommodate countersunk nail heads or screw

head. Therefore, it would have been obvious for a person having ordinary skill in the arts at the time of the Applicant's invention to modify the floor board of Palsson already modified by Olofsson et al. and Schneider to have the bottom lips of each of the groove on the longitudinal and transverse side, have a plurality of spaced apart recesses configured to accommodate countersunk nail heads or screw head as taught by Hall to have preformed holes to fix the floor board in place. Furthermore, it has been held that a mere duplication of parts, such as the duplication of the recesses, has no patentable significance unless a new and unexpected result is produced. A duplication of parts is generally recognized as being within the level of ordinary skill in the art. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1955).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Palsson in view of Olofsson et al. and Schneider as applied to claim 8 above, and in further view of Smid et al. (US 6012255).

Regarding claim 18, Palsson already modified by Olofsson et al. and Schneider discloses the floor board above, but does not disclose markings provided on a top side of the board and adapted to correspond to spacing between beams. However, Smid et al. in Figures 2A-2F discloses building material with a plurality of marks (12) corresponding to spacing of supports on which the building material would be mounted. Therefore, it would have been obvious for a person having ordinary skill in the arts at the time of the Applicant's invention to modify the floor board of Palsson already modified by Olofsson et al. and Schneider to include markings on a top side of the

board and adapted to correspond to spacing between beams as taught by Smid et al. to provide a visual indicator for a worker of where to fasten the board (Abstract).

Claims 20 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pålsson in view of Hall (US 347,425).

Regarding claims 20 and 26, Pålsson discloses a building board comprising two mutually opposite longitudinal edges (2', 2" of Figure 2) and two mutually opposite transverse edges (2"', 2<sup>iv</sup>, of Figure 6) running at right angles to the longitudinal edges, one longitudinal edge and one transverse edge in each case having a tongue (11, e respectively) and the opposite longitudinal edge and transverse edge having a groove (13, h respectively) corresponding to the tongue, via which a plurality of building boards can be connected to one another and locked in the vertical direction in relation to one another, wherein the groove on the longitudinal edge is bounded by a top lip (b) and a bottom lip (14), the bottom lip projects laterally beyond the top lip and has a concave recess (c) over the entire length, the tongue has a convex underside (d) which corresponds to the recess and that a bottom lip of the transverse edge has a substantially flat surface, but does not disclose that the bottom lip has a plurality of spaced apart depressions formed in the concave recess and configured to accommodate a countersunk nail head or screw head nor that the substantially flat surface of the bottom lip of the transverse edge has a plurality of spaced apart recesses. Hall, however, discloses a cladding wherein a central portion of a bottom lip (B) of a groove, which would be adjacent an underlying support surface, comprises a



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plurality of spaced apart recesses(c) configured to accommodate countersunk nail heads or screw head. Therefore, it would have been obvious for a person having ordinary skill in the arts at the time of the Applicant's invention to modify the floor board of Palsson to have the bottom lips of each of the groove on the longitudinal and transverse side, have a plurality of spaced apart recesses in the central portion of the groove configured to accommodate countersunk nail heads or screw head as taught by Hall to have preformed holes to securely fix the floor board to an underlying structure, the modification resulting in a plurality of recesses in the concave recess.

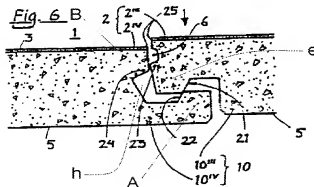
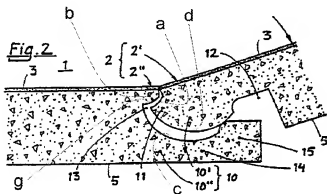
Claims 20 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pervan (US 7,127,860 B2) in view of Eisermann (US 6,804,926 B1) and Hall (US 347,425).

Regarding claim 20, Pervan in Figures 12a and 12b discloses a building board comprising two mutually opposite longitudinal edges (Fig. 12a) and two mutually opposite transverse edges (Fig. 12c) running at right angles to the longitudinal edges, one longitudinal edge and one transverse edge in each case having a tongue (10) and the opposite longitudinal edge and transverse edge having a groove (9) corresponding to the tongue, via which a plurality of building boards can be connected to one another and locked in the vertical direction in relation to one another, wherein the groove on the longitudinal edge is bounded by a top lip and a bottom lip, but does not disclose that the bottom lip projects laterally beyond the top lip and has a concave recess over the entire length, the tongue has a convex underside which corresponds to the recess, and the

bottom lip has a plurality of spaced apart depressions formed in the concave recess and configured to accommodate a countersunk nail head or screw head. However, Eisermann discloses a building board wherein a groove on the longitudinal edge is bounded by a top lip (22) and a bottom lip (21), the bottom lip projects laterally beyond the top lip and has a concave recess (23) over the entire length, and the tongue has a convex underside (7) which corresponds to the recess. Therefore, it would have been obvious to a person having ordinary skill in the arts at the time of the Applicant's invention to modify the structure of Pervan to have the longitudinal edge have the bottom lip project laterally beyond the top lip and a concave recess over the entire length, and the tongue has a convex underside which corresponds to the recess as taught by Eisermann to provide a tongue and groove joint that reduces that amount of deformation on the walls of the joint during assembly. Moreover, Hall discloses a cladding wherein a central portion of a bottom lip (B) of a groove, which would be adjacent an underlying support surface, comprises a plurality of spaced apart recesses(c) configured to accommodate countersunk nail heads or screw head. Therefore, it would have been obvious for a person having ordinary skill in the arts at the time of the Applicant's invention to modify the floor board of Pervan to have the bottom lip with a plurality of spaced apart recesses in the central portion of the groove configured to accommodate countersunk nail heads or screw head as taught by Hall to have preformed holes to securely fix the floor board to an underlying structure, the modification resulting in a plurality of recesses in the concave recess.

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Regarding claim 27, Pervan already modified by Eisermann and Hall discloses the structure discussed above and further discloses that the transverse edge is devoid of structure that locks, in a horizontal direction, two boards which are connected to one another.

**Annotated Figures**

Palsson US 2003/0079820



***Response to Arguments***

Applicant's arguments with respect to claims 1, 8, 16, and 22, and with respect to claim 1 in view of Palsson and Olofsson have been considered but are moot in view of the new ground(s) of rejection.

With respect to Applicant's argument for claims 1 and 8 as currently amended with the subject matter of cancelled claims 21 and 23 rejected under 35 U.S.C. 103(a) as unpatentable over Palsson in view of Olofsson and Schneider:

On pages 17-20 of the Remarks, Applicant argues, "Palsson appears to teach away from the proposed modification, because Palsson teaches assembling boards using a tilting and turning motion while Schneider teaches that the flat bevels facilitate assembly using sliding," and that "making the surfaces of Palsson flat (like Schneider) would not facilitate assembly of the Palsson panels." However, making the slightly curved bevel of Palsson into a flat or planar bevel as taught by Schneider would indeed facilitate the tilting and turning installation of Palsson. Palsson, in alternate embodiments of the longitudinal edge shown in Figures 1 through 3, shows a progression of a tongue having a curved top surface to a tongue having a completely flat or planar surface. The modification by Schneider to have a flat or planar bevel would facilitate seating the tongue and groove into one another and, as evidenced by Figure 3 of Palsson, a tilting and turning installation can be accomplished by flat or planar surfaces.

On page 11 of the Remarks, Applicant further argues that "no proper combination of Palsson and Olofsson suggests a recess adjacent the bevel." However, as shown in

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circled portion (b) of Olofsson, the tongue of Olofsson indeed comprises a recess.

Moreover, the recess in Olofsson may include the entire region extending before the right side of "a" and the left most edge of the top planar surface. Thus Olofsson discloses a recess adjacent a bevel "3". Further, Palsson already discloses the bevel "a," while Olofsson teaches a recess "6," the recess (6) of Olofsson being formed at the intersection of a vertical side wall and the tongue as shown in the annotated region (b). Modifying Palsson to include recess "6" of Olofsson would place recess "6" adjacent to the bevel "a" of Palsson, thus reading on the claimed limitations.

On page 12 of the Remarks, Applicant argues, "it does not necessarily flow from the teachings of Olofsson and Palsson that a recess added to Palsson would be adjacent to and conterminous with the alleged bevel of Palsson." However, the Examiner is not relying on inherency for the placement of the recess of Olofsson once placed in Palsson. Instead, the Examiner is merely relying on what is shown and taught by Olofsson. Olofsson shows that a glue recess is formed in part of a tongue and is formed at the junction of the tongue and a vertical surface adjacent the tongue. Modifying the building board of Palsson would as well place the recess in the tongue and in the junction of the tongue and a vertical surface adjacent the tongue, And thus resulting in the recess being adjacent and conterminous, or sharing the same boundary, as the bevel. Nonetheless, one of ordinary skill would find it obvious to place a glue recess, which is a well known feature in floor boards, in a location that would provide the best bond or best dispose of excess glue.

In response to Applicant's argument for claims 7, 12-14 and 20 rejected under 35 U.S.C. 103(a) as unpatentable over Palsson in view of Olofsson and Hall:

On page 14 of the Remarks, Applicant argues with respect to claim 20 that "Hall does not disclose or suggest recessed formed in a bottom lip that bounds a groove. Instead, Hall discloses spaced apart recesses in a flange" and that "Hall does not suggest spaced apart recesses formed in a concave recess." However, Hall indeed discloses a bottom lip "B" with a plurality of spaced apart depressions "c" centrally located in the bottom lip so that fastener heads can be flush with the top surface of the bottom lip "B." Moreover, modifying Palsson, which already has a groove in the bottom lip, to include a plurality of spaced apart depressions "c" as taught by Hall would place the spaced apart depressions in the concave bottom lip of Palsson that bounds a groove, thus reading on the claimed limitations. And although Hall may not disclose spaced apart recesses in a concave recess, Hall shows a general teaching that a bottom lip that is adjacent an underlying surface on to which a building board is to be fastened may have a plurality of spaced apart recesses to accommodate countersunk nail or screw heads.

On pages 15-16, Applicant argues with respect to claims 7 and 12-14 that Hall does not disclose both spaced apart recesses on the bottom lip of the longitudinal edge and spaced apart recesses on the bottom lip of the transverse edge and that it is not proper to apply duplication of parts to duplicate recesses in on the bottom lip of the transverse edge because the recesses are located on different parts of the invention. Hall shows a general teaching that a bottom lip that is adjacent an underlying surface on

to which a building board is to be fastened may have a plurality of spaced apart recesses to accommodate countersunk nail or screw heads. Both edges of the building board have tongue and groove connections designed to create a secure joint, and although the tongue and grooves on mutually perpendicular edges slightly differ, the bottom lip of both grooves is used to secure the building board to an underlying structure. In the instant case, the spaced apart recesses are being duplicated bottom lips on all edges of the building board and a duplication of parts is proper because there is no patentable significance in duplicating the recesses because no new or unexpected result is produced. To have recesses on the bottom lip of both the longitudinal edge and the transverse edge would produce an expected result of being able to securely fasten the building board with a countersunk fastener.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any



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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE T. CAJILIG whose telephone number is (571)272-8143. The examiner can normally be reached on Monday - Thursday from 8am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. T. C./  
Examiner, Art Unit 3633  
3/20/08

/Brian E. Glessner/

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Supervisory Patent Examiner, Art Unit 3633